





```
DDDDDDDD  BBBB BBBB  GGGGGGGG  SSSSSSSS  TTTTTTTTTT  000000
DDDDDDDD  BBBB BBBB  GGGGGGGG  SSSSSSSS  TTTTTTTTTT  000000
DD      DD  BB      BB  GG      SS      TT      OO      OO
DD      DD  BB      BB  GG      SS      TT      OO      OO
DD      DD  BB      BB  GG      SS      TT      OO      OO
DD      DD  BB      BB  GG      SS      TT      OO      OO
DD      DD  BBBB BBBB  GG      SSSSSS  TT      OO      OO
DD      DD  BBBB BBBB  GG      SSSSSS  TT      OO      OO
DD      DD  BB      BB  GG  GGGGGG  TT      OO      OO
DD      DD  BB      BB  GG  GGGGGG  TT      OO      OO
DD      DD  BB      BB  GG      GG      TT      OO      OO
DD      DD  BB      BB  GG      GG      TT      OO      OO
DDDDDDDD  BBBB BBBB  GGGGGG  SSSSSSSS  TT      000000
DDDDDDDD  BBBB BBBB  GGGGGG  SSSSSSSS  TT      000000
                                     ....
                                     ....
                                     ....
                                     ....
```

```
LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```



```
1 0001 0 MODULE DBGSTO ( IDENT = 'V04-000' ) =
2 0002 1 BEGIN
3 0003 1
4 0004 1 *****
5 0005 1 *
6 0006 1 *   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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23 0023 1 *
24 0024 1 *
25 0025 1 *****
26 0026 1
27 0027 1 FACILITY:      DEBUG
28 0028 1
29 0029 1 ++
30 0030 1 FUNCTIONAL DESCRIPTION:
31 0031 1     DECLARES GLOBAL VARIABLES FOR DEBUG FACILITY
32 0032 1
33 0033 1 Version:      1.12
34 0034 1
35 0035 1 History:
36 0036 1     Author:
37 0037 1         Carol Peters, 03 Jul 1976: Version 01
38 0038 1
39 0039 1     Modified by:
40 0040 1         Bruce Olsen, 11 SEP 1979
41 0041 1         Ken Nappa, 28 APR 1980
42 0042 1         Richard Title, 21 AUG 1981
43 0043 1
44 0044 1 Revision history:
45 0045 1 3.00 21-AUG-81      RT   Added some globals that are used during the
46 0046 1                      source line display.
47 0047 1 3.01 25-Sep-81  RT   Added & to dbg$token_table
48 0048 1 3.02 20-Oct-81  RT   Added dbg$gb_search_ptr and dbg$gb_def_search
49 0049 1                      to implement the SEARCH command.
50 0050 1 3.03 12-Nov-81  RT   Added dbg$gl_nest_stack and dbg$gl_nest_level
51 0051 1                      to fix a bug in handling nested subscript expressions
52 0052 1                      in FORTRAN and BASIC.
53 0053 1 3.04 20-Nov-81  RT   Added dbg$gb_set_module flag. This is used to
54 0054 1                      allow for module names that begin with a number.
55 0055 1 3.05 21-Dec-81  RT   Added DBG$GB_EXC_BRE_FLAG and DBG$GB_GO_ARG_FLAG
56 0056 1                      to handle continuing from an exception break.
57 0057 1 3.06 21-Dec-81  RT   Deleted changes 1.01 through 1.10 from this list
```



```
58 0058 1 |
59 0059 1 | 3.07 3-May-82 JF Added DBG$GB_IMPLEMENTATION
60 0060 1 | 3.08 06-May-82 RT Added data structure for SET DEFINE
61 0061 1 | 4.0 31-Aug-83 PS Added read error count global variable
62 0062 1 | 4.01 02-Sep-83 WC3 Added DBG$GL_CURRENT_PRIMARY
63 0063 1 | 4.02 13-Oct-83 WC3 Added DBG$GL_MOVED_DST_LIST_HEAD
64 0064 1 | --
65 0065 1 |
66 0066 1 | INCLUDE FILES
67 0067 1 |
68 0068 1 |
69 0069 1 | REQUIRE 'src$:DBGPROLOG.REQ';
70 0203 1 | LIBRARY 'LIB$:DBGGEN.L32';
71 0204 1 |
72 0205 1 | ++
73 0206 1 | *****
74 0207 1 | NOTE:
75 0208 1 |
76 0209 1 | All initialization of addresses and pointers in the debugger
77 0210 1 | MUST be done dynamically
78 0211 1 | to maintain position independence. At compile time these addresses
79 0212 1 | are relative to 0, but are relocated at run time since the debugger
80 0213 1 | is brought in "behind" the user program.
81 0214 1 | *****
82 0215 1 | --
83 0216 1 |
84 0217 1 | GLOBAL LITERAL
85 0218 1 | The base of RST storage. Some of the RST data structures base
86 0219 1 | 'pointers' off this. This is now a link time input
87 0220 1 |
88 0221 1 | DBG$RST_BEGIN = %X'7FFF0000'; for standard and test debugger
89 0222 1 | DBG$RST_BEGIN = "somewhere in PO for SUPERDEBUG
90 0223 1 |
91 0224 1 |
92 0225 1 | EXTERNAL LITERAL DBG$GL_SUP_OR_TEST : WEAK;
93 0226 1 |
94 0227 1 | GLOBAL DBG$GV_CONTROL : VECTOR[2,BYTE] INITIAL(
95 0228 1 | WORD(
96 0229 1 | (DBG$GL_SUP_OR_TEST) OR
97 0230 1 | (1^8))) ;
98 0231 1 |
99 0232 1 | ++
100 0233 1 | THE dbg$char_table associates each ASCII character with a value
101 0234 1 | from 0 to n. The meaning of the numeric value can be seen in
102 0235 1 | literal definitions declared in SCALIT.BEG (for example, 1 is bound
103 0236 1 | to alpha).
104 0237 1 | --
105 0238 1 | GLOBAL BIND
106 0239 1 | dbg$char_table = UPLIT BYTE (
107 0240 1 |
108 0241 1 | 6, 0, 0, 0, 0, 0, 0, 0, :000-007 treat null char as lf
109 0242 1 | 0, 4, 6, 6, 6, 6, 0, 0, :010-017 tab, lf, vtab, ff, cr
110 0243 1 | 0, 0, 0, 0, 0, 0, 0, 0, :020-027
111 0244 1 | 0, 0, 0, 0, 0, 0, 0, 0, :030-037
112 0245 1 | 4, 5, 16, 28, 1, 29, 0, 16, :040-047 space ! " # $ % & '
113 0246 1 | 9, 10, 21, 11, 24, 12, 20, 13, :050-057 ( ) * + - . /
114 0247 1 | 2, 2, 2, 2, 2, 2, 2, 2, :060-067 0 1 2 3 4 5 6 7
```



```

115 0248 1 2, 2, 14, 15, 22, 25, 23, 0, !070-077 8 9 : : < = > ?
116 0249 1 19, 3, 3, 3, 3, 3, 3, 1, !100-107 @ A B C D E F G
117 0250 1 1, 1, 1, 1, 1, 1, 1, 1, !110-117 H I J K L M N O
118 0251 1 1, 1, 1, 1, 1, 1, 1, 1, !120-127 P Q R S T U V W
119 0252 1 1, 1, 1, 26, 18, 27, 17, 1, !130-137 X Y Z [ \ ] ^ _
120 0253 1 0, 8, 8, 8, 8, 8, 8, 7, !140-147 ` a b c d e f g
121 0254 1 7, 7, 7, 7, 7, 7, 7, 7, !150-157 h i j k l m n o
122 0255 1 7, 7, 7, 7, 7, 7, 7, 7, !160-167 p q r s t u v w
123 0256 1 7, 7, 7, 0, 0, 0, 0, 0, !170-177 x y z { | } ~ delete
124 0257 1
125 0258 1 ) : VECTOR [,BYTE];
126 0259 1
127 0260 1 ! These two globals were copied over from DBGBLI.B32 after that module
128 0261 1 ! was eliminated.
129 0262 1
130 0263 1 GLOBAL
131 0264 1 dbg$access_list : VECTOR [6] INITIAL (REP 6 OF (0)); ! access actuals needed for structure
132 0265 1 ! references. The first element will
133 0266 1 ! contain the no. of actuals
134 0267 1
135 0268 1 GLOBAL
136 0269 1 dbg$gl_modrstptr2; ! Holds module rst pointer during TYPE command.
137 0270 1 ! e.g., TYPE MOD1\10,20,30
138 0271 1
139 0272 1 GLOBAL
140 0273 1 ++
141 0274 1 ! Byte vectors are used to contain the
142 0275 1 ! 'mode', 'step type', 'search type',
143 0276 1 ! and output configuration data structures and
144 0277 1 ! also, the buffers used by RMS to return fully qualified filespecs
145 0278 1 --
146 0279 1 dbg$gb_def_mod: VECTOR [mode_levels * mode_lvl_size, BYTE], ! DEFAULT MODE BLOCK
147 0280 1 DBG$GB_DEF_STP : BLOCKVECTOR
148 0281 1 [STEP_LEVELS, EVENT$K_STEPPING_DESC_SIZE]
149 0282 1 FIELD (EVENT$STEPPING_DESC_FIELDS),
150 0283 1 dbg$gb_def_search: VECTOR [search_levels * search_lvl_size, BYTE],
151 0284 1 dbg$gb_def_define: VECTOR [define_levels * define_lvl_size, BYTE],
152 0285 1 dbg$gb_def_out: VECTOR [output_size, BYTE], ! DEFAULT OUTPUT CONFIG
153 0286 1
154 0287 1
155 0288 1 ++
156 0289 1 *****
157 0290 1 NOTE:
158 0291 1
159 0292 1 All initialization of addresses and filespec "strings" input to
160 0293 1 RMS user control blocks (FABs, RABs, etc.) MUST be done dynamically
161 0294 1 to maintain position independence. At compile time these addresses
162 0295 1 are relative to 0, but are relocated at run time since the debugger
163 0296 1 is brought in "behind" the user program.
164 0297 1 *****
165 0298 1 --
166 0299 1 ++
167 0300 1 declare the FAB and RAB blocks for terminal I/O.
168 0301 1
169 0302 1
170 P 0303 1 dbg$gl_inpfab: $FAB (FAC=GET
171 P 0304 1 , MRS=no_of_inp_chars
```



```
172 0305 1
173 P 0306 1      dbg$gl_outpfab: $FAB (FAC=PUT
174 P 0307 1      , MRS=tty_out_width
175 P 0308 1      , RAT=<CR>
176 P 0309 1      , SHR=<NIL>
177 0310 1
178 P 0311 1      dbg$gl_inprab: $RAB (USZ=no_of_inp_chars
179 P 0312 1      , ROP=<PMT>
180 0313 1
181 0314 1      dbg$gl_outprab: $RAB (),
182 0315 1
183 0316 1
184 0317 1      ! Declare FAB and RAB blocks for LOG file
185 0318 1
186 P 0319 1      dbg$gl_logfab: $FAB (RFM=VAR
187 P 0320 1      , FAC=PUT
188 P 0321 1      , FOP=<MXV>
189 P 0322 1      , MRS=tty_out_width
190 P 0323 1      , RAT=CR
191 P 0324 1      , SHR=NIL
192 0325 1
193 P 0326 1      dbg$gl_lograb: $RAB (ROP=<EOF>
194 0327 1
195 0328 1
196 0329 1      ++
197 0330 1      ! We'll give 20 tries for read error before take the exit.
198 0331 1      --
199 0332 1      dbg$gl_readerr_cnt: INITIAL (0),
200 0333 1
201 0334 1
202 0335 1      ++
203 0336 1      ! This the only bitvector.
204 0337 1      --
205 0338 1      dbg$gl_context: BITVECTOR [context_bits],          ! context LONGWORD
206 0339 1
207 0340 1      ! These are the global bytes.
208 0341 1
209 0342 1      dbg$gb_set_module_flag: BYTE,      ! TRUE during processing of SET MODULE.
210 0343 1      ! This changes the behavior of the
211 0344 1      ! lexers so that they allow module
212 0345 1      ! names that begin with numbers.
213 0346 1      dbg$gb_exc_bre_flag: BYTE,      ! TRUE if we are in an EXCEPTION BREAK
214 0347 1      dbg$gb_go_arg_flag: BYTE,      ! TRUE if there is an argument to GO
215 0348 1      dbg$gb_language: BYTE,      ! HOLDS LANGUAGE INDEX
216 0349 1      dbg$gb_loc_type: BYTE,      ! TELLS WHAT SORT OF END RANGE LOCATION
217 0350 1      dbg$gb_resignal: BYTE,      ! BOOLEAN, TRUE IF RESIGNALING ALL EXCEPTIONS
218 0351 1      dbg$gb_take_cmd: BYTE,      ! BOOLEAN, TRUE IF ANOTHER COMMAND WILL BE READ
219 0352 1      dbg$gb_tbit_ok: BYTE,      ! TBITS ARE LEGAL
220 0353 1      dbg$gb_sym_status : BYTE,      ! contains status of sym lookups.
221 0354 1      dbg$gb_no_globals : BYTE,      ! replaces mc_global_locked flag.
222 0355 1      dbg$gb_keypad_input: BYTE,      ! TRUE if we are doing keypad input
223 0356 1      dbg$gb_verb : BYTE,
224 0357 1
225 0358 1      dbg$gb_radix: VECTOR[3,BYTE],      ! Contains the radices specified
226 0359 1      ! in a SET RADIX[/OVERR] command,
227 0360 1      ! or dbg$gk_default if no radix
228 0361 1      ! override is in effect.
```



```
229 0362 1
230 0363 1
231 0364 1
232 0365 1
233 0366 1
234 0367 1
235 0368 1
236 0369 1
237 0370 1
238 0371 1
239 0372 1
240 0373 1
241 0374 1
242 0375 1
243 0376 1
244 0377 1
245 0378 1
246 0379 1
247 0380 1
248 0381 1
249 0382 1
250 0383 1
251 0384 1
252 0385 1
253 0386 1
254 0387 1
255 0388 1
256 0389 1
257 0390 1
258 0391 1
259 0392 1
260 0393 1
261 0394 1
262 0395 1
263 0396 1
264 0397 1
265 0398 1
266 0399 1
267 0400 1
268 0401 1
269 0402 1
270 0403 1
271 0404 1
272 0405 1
273 0406 1
274 0407 1
275 0408 1
276 0409 1
277 0410 1
278 0411 1
279 0412 1
280 0413 1
281 0414 1
282 0415 1
283 0416 1
284 0417 1
285 0418 1
```

```

This can be indexed by three constants:
dbg$b_radix_input 0
dbg$b_radix_output 1
dbg$b_radix_output_over 2
Corresponding to the three kinds
of radix settings (these are defined
in DBGLIB). (This method of having
a byte vector instead of three
separate global bytes saves on
link time, and should be used
more extensively in this module.)

dbg$gb_unhandled_exc :      ! dbg$gb_unhandled_exc[0] is
    VECTOR[10, BYTE]        ! TRUE after an unhandled exception.
    INITIAL(BYTE(REP 10 OF (0))) ! This is a vector because we push
                                ! the value on a call.

++
Global words.
--
dbg$gw_length,
dbg$gw_loclength : INITIAL (0),
dbg$gw_gbllength : INITIAL (0),
dbg$gw_dfltleng : INITIAL (0),
                                ! a place for the parser to store a
                                ! Length given in a verb modifier ty
                                ! Length given an override type spec
                                ! length given in a default type spe

++
Now refs to byte vectors. Don't confuse these with byte
vectors.
--
dbg$gb_verptr :      REF VECTOR [, BYTE],      ! POINTER TO INPUT BUFFER FOR VERIFY
dbg$gb_mod_ptr :      REF VECTOR [, BYTE],      ! POINTER TO CURRENT MODE LEVEL
DBG$GB_STP_PTR :      REF EVENT$STEPPING_DESCRIPTOR, ! POINTER TO CURRENT STEP TYPE
dbg$gb_search_ptr : REF VECTOR [, BYTE],      ! Pointer to search settings
dbg$gb_define_ptr : REF VECTOR [, BYTE],      ! Pointer to define settings

++
REFs to more complicated (or more general)
things than the above BYTE vectors.
(The defn of the following 'types' is why
DBG$RST.BEG is included in this module.)
--
dbg$gb_logfsr : REF VECTOR [, BYTE],      ! Resultant LOG filespec
dbg$gb_logfse : REF VECTOR [, BYTE],      ! Expanded LOG filespec
dbg$gl_lognam : REF $NAM_DECL,             ! LOG file NAM block

                                ! Pointer to the current scope vector (CSP)
DBG$GL_CSP_PTR : REF pth$pathname,

DBG$GL_CISHEAD : REF CISC$LINK,             ! Command input stream anchor
DBG$GL_CIS_LEVELS : INITIAL(0),             ! Number of levels of CIS

++
Normal longword vectors.
--
```



```
286 0419 1
287 0420 1
288 0421 1
289 0422 1
290 0423 1
291 0424 1
292 0425 1
293 0426 1
294 0427 1
295 0428 1
296 0429 1
297 0430 1
298 0431 1
299 0432 1
300 0433 1
301 0434 1
302 0435 1
303 0436 1
304 0437 1
305 0438 1
306 0439 1
307 0440 1
308 0441 1
309 0442 1
310 0443 1
311 0444 1
312 0445 1
313 0446 1
314 0447 1
315 0448 1
316 0449 1
317 0450 1
318 0451 1
319 0452 1
320 0453 1
321 0454 1
322 0455 1
323 0456 1
324 0457 1
325 0458 1
326 0459 1
327 0460 1
328 0461 1
329 0462 1
330 0463 1
331 0464 1
332 0465 1
333 0466 1
334 0467 1
335 0468 1
336 0469 1
337 0470 1
338 0471 1
339 0472 1
340 0473 1
341 0474 1
342 0475 1

dbg$reg_values : VECTOR [17, LONG]          ! Register values
                INITIAL (REP 17 OF (0)),
dbg$reg_vector : VECTOR [17, LONG]
                INITIAL (REP 17 OF (0)),
dbg$gl_dimenlst : VECTOR [10],
dbg$gl_nest_stack : VECTOR [25],
                ! Vector of pointers to context regs
                ! dimensions for FORTRAN array
                ! This stack holds the
                ! contents of DBG$GL_DIMENLST
                ! during nested subscript
                ! expressions. See the
                ! routines DBG$PUSH_NEST_STACK
                ! and DBG$POP_NEST_STACK
                ! in the module DBGREDUC
                ! for details on how this works.

dbg$gl_nest_level,
                ! The level of nesting of
                ! subscript expressions.
                ! LIST FOR COMMAND ARGUMENTS
                ! addresses of parse tables
                ! semantic stack for tokens, etc.

dbg$gl_list: VECTOR [3],
dbg$gl_partbptr: VECTOR [5],
dbg$gl_stk : semantic_stack,

!++
! And finally the global scalar longwords.
!--
dbg$gl_asci_len : INITIAL (4),
dbg$gl_bpthead,
dbg$gl_cmd_radix,
dbg$gl_current_primary,
dbg$gl_moved_dst_list_head : INITIAL(0),
dbg$gl_type,
dbg$gl_dflttyp : INITIAL (DSC$K_DTYPE_L),
dbg$gl_loctyp : INITIAL (-1),
dbg$gl_edit_enabled : INITIAL (0),
                ! Number of ascii characters to output
                ! POINTER TO HEAD OF BREAKPOINT CHAIN
                ! Set on EX/override_radix
                ! Pointer to the current primary
                ! Head of the moved DST list
                ! a place for the parser to store a type.
                ! The type specified in a SET TYPE statement.
                ! Type specified in verb modifier
                ! Global saying whether EDIT
                ! command is enabled.
                ! global override type.
                ! current lexical lexeme routine
                ! pointer to input for HELP
                ! Pointer to icf filespec
                ! pointer to current element of com arg list
                ! Used by DEFINE/KEY
                ! Used by DEFINE/KEY
                ! name of current keyword table
                ! LAST LOCATION DISPLAYED
                ! LAST VALUE DISPLAYED
                ! Address of LIB$SIGNAL
                ! Address of LIB$STOP
                ! NEXT LOCATION TO DISPLAY
                ! The type specified as a verb modifier.
                ! TRUE DURING set source

dbg$gl_gbltyp : INITIAL (-1),
dbg$gl_get_lex,
dbg$gl_help_input,
dbg$gl_ind_com_file,
dbg$gl_lis_ptr,
dbg$gl_key_table_id,
dbg$gl_keyboard_id,
dbg$gl_keyw_tbl,
dbg$gl_last_loc,
dbg$gl_last_val,
dbg$gl_lib_signal_addr : INITIAL(0),
dbg$gl_lib_stop_addr : INITIAL(0),
dbg$gl_next_loc,
dbg$gl_ovridtyp : INITIAL (0),
dbg$gl_set_source : INITIAL(0),
dbg$gl_set_source2 : INITIAL(0),
dbg$gl_reduc_rt,
dbg$gl_step_num,
dbg$gl_symhead,
dbg$gl_dlistlast : INITIAL(0),
                ! name of current action routines
                ! number of steps in stepping
                ! POINTER TO HEAD OF SYMBOL TABLE
                ! Pointer to last item in
                ! in list of dummy descriptors
                ! Points to head of command execution
                ! tree for SEARCH.
                ! Contains "transfer address"

dbg$gl_search_verb,
dbg$gl_transfer_address: INITIAL(0),
```



```

343      0476 1
344      0477 1
345      0478 1
346      0479 1
347      0480 1
348      0481 1
349      0482 1
350      0483 1
351      0484 1
352      0485 1
353      0486 1
354      0487 1
355      0488 1
356      0489 1
357      0490 1
358      0491 1
359      0492 1
360      0493 1
361      0494 1
362      0495 1
363      0496 1
364      0497 1
365      0498 1 GLOBAL
366      0499 1
367      0500 1
368      0501 1
369      0502 1
370      0503 1
371      0504 1
372      0505 1 GLOBAL
373      0506 1
374      0507 1
375      0508 1 END
376      0509 0 ELUDOM

! as seen in TRANSFERS$ADDRESS
! DST record.

! Globals used for communication between the phases of the
! SET SOURCE command:
dbg$gl_module : INITIAL(0),
dbg$gl_dirlist,

! Contains the module rst pointer
! Contains a pointer to the
! directory list.

dbg$gl_log_buf, ! pointer to buffer containing LOG f

! Some globals used for communication between the phases of
! deposit_cmd:

dbg$floating_buffer : vector[30,byte],
dbg$float_desc : BLOCK[8,BYTE],
dbg$dbl_desc : BLOCK[8,BYTE],
dbg$dyn_str_desc, ! pointer to descriptor for dynamic string
dbg$deposit_source : BLOCK[12, BYTE], ! A standard descriptor for the source
dbg$deposit_target : BLOCK[12, BYTE]; ! A standard descriptor for the target

! Globals used for dst and gst management.

dbg$dst_begin_addr, ! virtual address where DST begins.
dbg$dst_end_addr, ! virtual address of last byte in DST.
dbg$dst_next_addr, ! virtual address where 'next' DST record begins.
dbg$gsr_begin_addr, ! virtual address where GST begins.
dbg$gsr_next_addr : ref vector[,word]; ! virtual address of 'next' GST

dbg$runframe : VECTOR[dbg$k_runfr_len/3 + 4, LONG] ! The current runframe
INITIAL (REP (dbg$k_runfr_len/3 + 4) OF (0));
```

```

.TITLE DBGSTO
.IDENT \V04-000\

.PSECT DBG$PLIT,NOWRT, SHR, PIC,0

00 06 06 06 06 04 00 00 00 00 00 00 00 06 00000 P.AA: .BYTE 6, 0, 0, 0, 0, 0, 0, 0, 0, 0, 4, 6, 6, 6, 6, - :
00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000F 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, - :
18 08 15 0A 09 10 00 1D 01 1C 10 05 04 00 00 0001E 0, 0, 0, 0, 4, 5, 16, 28, 1, 29, 0, 16, - :
0F 0E 02 02 02 02 02 02 02 02 02 02 0D 14 0C 0002D 9, 10, 21, 11, 24, 12, 20, 13, 2, 2, 2, - :
01 01 01 01 03 03 03 03 03 03 13 00 17 19 16 0003C 2, 2, 2, 2, 2, 2, 2, 14, 15, 22, 25, 23, - :
01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 0004B 0, 19, 3, 3, 3, 3, 3, 3, 1, 1, 1, 1, 1, - :
07 07 08 08 08 08 08 08 00 01 11 18 12 1A 01 0005A 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, - :
07 07 07 07 07 07 07 07 07 07 07 07 07 07 07 00069 1, 26, 18, 27, 17, 1, 0, 8, 8, 8, 8, 8, - :
07 07 07 07 07 07 07 07 07 07 07 07 07 07 07 00078 8, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, - :
7, 7, 7, 7, 7, 7, 7, 0, 0, 0, 0, 0, 0, 0, 0, 0, - :

.PSECT DBG$GLOBAL,NOEXE, PIC,2

0000* 00000 DBG$GV_CONTROL::
00002 .WORD <DBG$GL_SUP_OR_TEST!256>
.BLK 2
```



```
00000000# 00004 DBG$ACCESS LIST::
               .LONG 0[6]
0001C DBG$GL_MODRSTPTR2::
               .BLKB 4
00020 DBG$GB_DEF MOD::
               .BLKB 40
00048 DBG$GB_DEF STP::
               .BLKB 24
00060 DBG$GB_DEF SEARCH::
               .BLKB 6
00066         .BLKB 2
00068 DBG$GB_DEF DEFINE::
               .BLKB 3
0006B         .BLKB 1
0006C DBG$GB_DEF OUT::
               .BLKB 3
0006F         .BLKB 1
03 00070 DBG$GL_INPFAB::
               .BYTE 3
50 00071         .BYTE 80
0000 00072         .WORD 0
00000000 00074         .LONG 0
00000000 00078         .LONG 0
00000000 0007C         .LONG 0
00000000 00080         .LONG 0
0000 00084         .WORD 0
02 00086         .BYTE 2
00 00087         .BYTE 0
00000000 00088         .LONG 0
00 0008C         .BYTE 0
00 0008D         .BYTE 0
00 0008E         .BYTE 0
02 0008F         .BYTE 2
00000000 00090         .LONG 0
00000000 00094         .LONG 0
00000000 00098         .LONG 0
00000000 0009C         .LONG 0
00000000 000A0         .LONG 0
00 000A4         .BYTE 0
00 000A5         .BYTE 0
0084 000A6         .WORD 132
00000000 000A8         .LONG 0
0000 000AC         .WORD 0
00 000AE         .BYTE 0
00 000AF         .BYTE 0
00000000 000B0         .LONG 0
00000000 000B4         .LONG 0
0000 000B8         .WORD 0
00 000BA         .BYTE 0
00 000BB         .BYTE 0
00000000 000BC         .LONG 0
03 000C0 DBG$GL_OUTPFAB::
               .BYTE 3
50 000C1         .BYTE 80
0000 000C2         .WORD 0
00000000 000C4         .LONG 0
00000000 000C8         .LONG 0
```



00000000	000CC	.LONG	0
00000000	000D0	.LONG	0
0000	000D4	.WORD	0
01	000D6	.BYTE	1
20	000D7	.BYTE	32
00000000	000D8	.LONG	0
00	000DC	.BYTE	0
00	000DD	.BYTE	0
02	000DE	.BYTE	2
02	000DF	.BYTE	2
00000000	000E0	.LONG	0
00000000	000E4	.LONG	0
00000000	000E8	.LONG	0
00000000	000EC	.LONG	0
00000000	000F0	.LONG	0
00	000F4	.BYTE	0
00	000F5	.BYTE	0
0084	000F6	.WORD	132
00000000	000F8	.LONG	0
0000	000FC	.WORD	0
00	000FE	.BYTE	0
00	000FF	.BYTE	0
00000000	00100	.LONG	0
00000000	00104	.LONG	0
0000	00108	.WORD	0
00	0010A	.BYTE	0
00	0010B	.BYTE	0
00000000	0010C	.LONG	0
01	00110	DBG\$GL_INPRAB::	
		.BYTE	1
44	00111	.BYTE	68
0000	00112	.WORD	0
40000000	00114	.LONG	1073741824
00000000	00118	.LONG	0
00000000	0011C	.LONG	0
0000#	00120	.WORD	0[3]
0000	00126	.WORD	0
00000000	00128	.LONG	0
0000	0012C	.WORD	0
00	0012E	.BYTE	0
00	0012F	.BYTE	0
0084	00130	.WORD	132
0000	00132	.WORD	0
00000000	00134	.LONG	0
00000000	00138	.LONG	0
00000000	0013C	.LONG	0
00000000	00140	.LONG	0
00	00144	.BYTE	0
00	00145	.BYTE	0
00	00146	.BYTE	0
00	00147	.BYTE	0
00000000	00148	.LONG	0
00000000	0014C	.LONG	0
00000000	00150	.LONG	0
01	00154	DBG\$GL_OUTPRAB::	
		.BYTE	1
44	00155	.BYTE	68



0000	00156	.WORD	0
00000000	00158	.LONG	0
00000000	0015C	.LONG	0
00000000	00160	.LONG	0
0000#	00164	.WORD	0[3]
0000	0016A	.WORD	0
00000000	0016C	.LONG	0
0000	00170	.WORD	0
00	00172	.BYTE	0
00	00173	.BYTE	0
0000	00174	.WORD	0
0000	00176	.WORD	0
00000000	00178	.LONG	0
00000000	0017C	.LONG	0
00000000	00180	.LONG	0
00000000	00184	.LONG	0
00	00188	.BYTE	0
00	00189	.BYTE	0
00	0018A	.BYTE	0
00	0018B	.BYTE	0
00000000	0018C	.LONG	0
00000000	00190	.LONG	0
00000000	00194	.LONG	0
03	00198	DBG\$GL_LOGFAB::	
		.BYTE	3
50	00199	.BYTE	80
0000	0019A	.WORD	0
00000002	0019C	.LONG	2
00000000	001A0	.LONG	0
00000000	001A4	.LONG	0
00000000	001A8	.LONG	0
0000	001AC	.WORD	0
01	001AE	.BYTE	1
20	001AF	.BYTE	32
00000000	001B0	.LONG	0
00	001B4	.BYTE	0
00	001B5	.BYTE	0
02	001B6	.BYTE	2
02	001B7	.BYTE	2
00000000	001B8	.LONG	0
00000000	001BC	.LONG	0
00000000	001C0	.LONG	0
00000000	001C4	.LONG	0
00000000	001C8	.LONG	0
00	001CC	.BYTE	0
00	001CD	.BYTE	0
0084	001CE	.WORD	132
00000000	001D0	.LONG	0
0000	001D4	.WORD	0
00	001D6	.BYTE	0
00	001D7	.BYTE	0
00000000	001D8	.LONG	0
00000000	001DC	.LONG	0
0000	001E0	.WORD	0
00	001E2	.BYTE	0
00	001E3	.BYTE	0
00000000	001E4	.LONG	0



```
01 001E8 DBG$GL_LOGRAB::
      44 001E9 .BYTE 1
0000 001EA .WORD 68
00000100 001EC .LONG 0
00000000 001F0 .LONG 256
00000000 001F4 .LONG 0
0000# 001F8 .LONG 0
0000 001FE .WORD 0[3]
00000000 00200 .WORD 0
0000 00204 .LONG 0
00 00206 .WORD 0
00 00207 .BYTE 0
0000 00208 .BYTE 0
0000 0020A .WORD 0
00000000 0020C .WORD 0
00000000 00210 .LONG 0
00000000 00214 .LONG 0
00000000 00218 .LONG 0
00 0021C .LONG 0
00 0021D .BYTE 0
00 0021E .BYTE 0
00 0021F .BYTE 0
00000000 00220 .LONG 0
00000000 00224 .LONG 0
00000000 00228 .LONG 0
00000000 0022C DBG$GL_READERR_CNT::
      .LONG 0
00230 DBG$GL_CONTEXT::
      .BLKB 4
00234 DBG$GB_SET_MODULE_FLAG::
      .BLKB 1
00235 DBG$GB_EXC BRE_FLAG::
      .BLKB 1
00236 DBG$GB_GO_ARG_FLAG::
      .BLKB 1
00237 DBG$GB_LANGUAGE::
      .BLKB 1
00238 DBG$GB_LOC_TYPE::
      .BLKB 1
00239 DBG$GB_RESIGNAL::
      .BLKB 1
0023A DBG$GB_TAKE_CMD::
      .BLKB 1
0023B DBG$GB_TBIT_OK::
      .BLKB 1
0023C DBG$GB_SYM_STATUS::
      .BLKB 1
0023D DBG$GB_NO_GLOBALS::
      .BLKB 1
0023E DBG$GB_KEY_AD_INPUT::
      .BLKB 1
0023F DBG$GB_VERB::
      .BLKB 1
00240 DBG$GB_RADIX::
      .BLKB 3
00243 .BLKB 1
```



```
00# 00244 DBG$GB_UNHANDLED_EXC::
      .BYTE 0[10]
0024E .BLKB 2
00250 DBG$GW_LENGTH::
      .BLKB 4
00000000 00254 DBG$GW_LOCLNGTH::
      .LONG 0
00000000 00258 DBG$GW_GBLNGTH::
      .LONG 0
00000000 0025C DBG$GW_DFLTLENG::
      .LONG 0
00260 DBG$GB_VERPTR::
      .BLKB 4
00264 DBG$GB_MOD_PTR::
      .BLKB 4
00268 DBG$GB_STP_PTR::
      .BLKB 4
0026C DBG$GB_SEARCH_PTR::
      .BLKB 4
00270 DBG$GB_DEFINE_PTR::
      .BLKB 4
00274 DBG$GB_LOGFSR::
      .BLKB 4
00278 DBG$GB_LOGFSE::
      .BLKB 4
0027C DBG$GL_LOGNAM::
      .BLKB 4
00280 DBG$GL_CSP_PTR::
      .BLKB 4
00284 DBG$GL_CISHEAD::
      .BLKB 4
00000000 00288 DBG$GL_CIS_LEVELS::
      .LONG 0
00000000# 0028C DBG$REG_VALUES::
      .LONG 0[17]
00000000# 002D0 DBG$REG_VECTOR::
      .LONG 0[17]
00314 DBG$GL_DIMENLST::
      .BLKB 40
0033C DBG$GL_NEST_STACK::
      .BLKB 100
003A0 DBG$GL_NEST_LEVEL::
      .BLKB 4
003A4 DBG$GL_LIST::
      .BLKB 12
003B0 DBG$GL_PARTBPTR::
      .BLKB 20
003C4 DBG$GL_STK::
      .BLKB 480
00000004 005A4 DBG$GL_ASCII_LEN::
      .LONG 4
005A8 DBG$GL_BPTHEAD::
      .BLKB 4
005AC DBG$GL_CMND_RADIX::
      .BLKB 4
005B0 DBG$GL_CURRENT_PRIMARY::
      .BLKB 4
```



G 2  
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```
00000000 005B4 DBG$GL_MOVED_DST_LIST_HEAD::
          .LONG 0
005B8 DBG$GL_TYPE::
          .BLKB 4
00000008 005BC DBG$GL_DFLT_TYP::
          .LONG 8
FFFFFFFF 005C0 DBG$GL_LOCTYP::
          .LONG -1
00000000 005C4 DBG$GL_EDIT_ENABLED::
          .LONG 0
FFFFFFFF 005C8 DBG$GL_GBLTYP::
          .LONG -1
005CC DBG$GL_GET_LEX::
          .BLKB 4
005D0 DBG$GL_HELP_INPUT::
          .BLRB 4
005D4 DBG$GL_IND_COM_FILE::
          .BLKB 4
005D8 DBG$GL_LIS_PTR::
          .BLKB 4
005DC DBG$GL_KEY_TABLE_ID::
          .BLKB 2
005E0 DBG$GL_KEYBOARD_ID::
          .BLKB 4
005E4 DBG$GL_KEYW_TBL::
          .BLRB 4
005E8 DBG$GL_LAST_LOC::
          .BLRB 4
005EC DBG$GL_LAST_VAL::
          .BLRB 4
00000000 005F0 DBG$GL_LIB_SIGNAL_ADDR::
          .LONG 0
00000000 005F4 DBG$GL_LIB_STOP_ADDR::
          .LONG 0
005F8 DBG$GL_NEXT_LOC::
          .BLRB 4
00000000 005FC DBG$GL_OVRIDTYP::
          .LONG 0
00000000 00600 DBG$GL_SET_SOURCE::
          .LONG 0
00000000 00604 DBG$GL_SET_SOURCE2::
          .LONG 0
00608 DBG$GL_REduc_RT::
          .BLKB 4
0060C DBG$GL_STEP_NUM::
          .BLRB 4
00610 DBG$GL_SYMHEAD::
          .BLKB 4
00000000 00614 DBG$GL_DLISLAST::
          .LONG 0
00618 DBG$GL_SEARCH_VERB::
          .BLKB 4
00000000 0061C DBG$GL_TRANSFER_ADDRESS::
          .LONG 0
00000000 00620 DBG$GL_MODULE::
          .LONG 0
00624 DBG$GL_DIRLIST::
```



```
00628 DBG$GL_LOG_BUF::      .BLKB 4
0062C DBG$FLOATING_BUFFER::  .BLKB 4
0064A      .BLKB 30
0064C DBG$FLOAT_DESC::      .BLKB 2
00654 DBG$DBL_DESC::        .BLKB 8
0065C DBG$DYN_STR_DESC::    .BLKB 8
00660 DBG$DEPOSIT_SOURCE::  .BLKB 4
0066C DBG$DEPOSIT_TARGET::  .BLKB 12
00678 DBG$DST_BEGIN_ADDR::  .BLKB 12
0067C DBG$DST_END_ADDR::    .BLKB 4
00680 DBG$DST_NEXT_ADDR::   .BLKB 4
00684 DBG$GSR_BEGIN_ADDR::  .BLKB 4
00688 DBG$GSR_NEXT_ADDR::   .BLKB 4
00000000# 0068C DBG$RUNFRAME:: .BLKB 4
                                .LONG 0[37]
```

```
DBG$CHAR_TABLE== P.AAA
                 .WEAK DBG$GL_SUP_OR_TEST
```

## PSECT SUMMARY

Name	Bytes	Attributes
DBG\$GLOBAL	1824	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, PIC, ALIGN(2)
DBG\$PLIT	128	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(0)

## Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
-\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	30	0	1000	00:01.9
-\$255\$DUA28:[DEBUG.OBJ]STRUCDEF.L32;1	32	0	0	7	00:00.1
-\$255\$DUA28:[DEBUG.OBJ]DBGLIB.L32;1	1545	41	2	97	00:01.9
-\$255\$DUA28:[DEBUG.OBJ]DSTRECRDS.L32;1	418	0	0	31	00:00.3
-\$255\$DUA28:[DEBUG.OBJ]DBGMSG.L32;1	386	1	0	22	00:00.3
-\$255\$DUA28:[DEBUG.OBJ]DBGGEN.L32;1	150	30	20	12	00:00.3



DBGSTO  
V04-000

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COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:DBGSTO/OBJ=OBJ\$:DBGSTO MSRC\$:DBGSTO/UPDATE=(ENH\$:DBGSTO)

: Size: 0 code + 1952 data bytes  
: Run Time: 00:15.0  
: Elapsed Time: 00:18.0  
: Lines/CPU Min: 2036  
: Lexemes/CPU-Min: 27492  
: Memory Used: 113 pages  
: Compilation Complete



0095 AH-BT13A-SE  
VAX/VMS V4.0

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